Course Information and Policies (General Syllabus)

Description

>This course introduces the calculus of a single variable. It emphasizes mathematical theory, as well as the utility of calculus in engineering and science. The goal of the course is a thorough understanding of the mathematics, plus the ability to apply calculus in a variety of situations.

Prerequisite

>A score of 80 or higher on the CMPT.

Text

>Single Variable Calculus: Early Transcendentals by James Stewart, 7th Edition, Brooks/Cole, 2012 – required.

Technology

>Software – WebAssign (WA) required.

>Calculator – Students will be expected to use either a laptop computer or a basic graphing calculator for homework and classroom exercises. **Students will not be permitted to use computers or calculators on any unit test or the Final Exam.**

>Cellphones and other technology – Students will not be permitted to use cellphones or any other technology (including smart watches) on any unit tests or the Final Exam. **Cellphones should be silenced and stored away during class**.

Websites

>https://mthsc.clemson.edu/ug/MthSc106/ -- General MATH 1060 site which includes this syllabus, a daily schedule, old tests, announcements, and other useful information.

>http://www.registrar.clemson.edu/publicat/catalog/2016/2016catalog.pdf -- Detailed information about Clemson University undergraduate class regulations.

>Blackboard: http://bb.clemson.edu   Canvas: https://clemson.instructure.com/
>Your 1060 instructor will share documents with you using Blackboard or Canvas. You are responsible for checking this website and your university e-mail account (userid@clemson.edu) on a regular basis for announcements and class materials.

Academic Dishonesty

Students are expected to adhere to the following official Clemson academic integrity statement. You may get and give help with your homework, but do not submit another student's work. Giving someone else access to your Blackboard, Canvas, or WebAssign account could be considered academic dishonesty.

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."

Students found "in violation" by a hearing board will be subject to penalties as outlined in the Undergraduate Academic Integrity Policy.

Structure

Classroom structure will be determined by your instructor.
Prior to each class meeting, you should

- Complete the homework assignment from the previous class meeting.
- Read the assigned material in the text from the scheduled section.
- Begin the next homework assignment.

It is the student's responsibility to master the objectives of the course. Resources available to you include the instructor, the class teaching assistants, your fellow students, the MATH 1060 web site, the library, on-line resources, and Peer Assisted Learning (PAL). Dedicated effort is needed to master the learning objectives of this course. Students are expected to aggressively participate in their own learning by reading the book, practicing the testable skills, and seeking help in a timely manner when necessary.

Attendance

You are expected to be regular and **punctual** in your class attendance. You are responsible for all notes, assignments, and announcements made in class. Students who have more than 8 absences may be dropped from the course. You must provide your instructor with proper documentation for university sanctioned absences. If the instructor does not arrive in the classroom within 15 minutes after the scheduled start time, class is dismissed for the day.

Any exam scheduled at the time of a class that is cancelled because of inclement weather (or other unforeseen events) will be given at the next class meeting unless you are told otherwise by the instructor. Similarly, any assignment due at the time of a cancelled class will be due at the next class meeting unless you are told otherwise by the instructor. Any extension or postponement of assignments or exams must be granted by the instructor within 24 hours of the cancellation.

Grading

The final course grade will be determined by the scores on

- 3 Common Tests (T1, T2, T3); 20% each (Dates: 2/8, 3/8, 4/19)
- Learning Activities (LA) – the average of in-class group work, traditional paper homework, quizzes, etc., as determined by individual instructors; weighted 10%
- Department WebAssign Homework (WA); weighted 10%
- Common Final Exam (FE); weighted 20% (Date: 5/1)

The Final Exam is mandatory (no exemptions) and comprehensive. No rescheduling of the final exam will be permitted.

To earn a passing grade for the course, a student must have:

(a) a final exam score of 60 (60%) or higher

or

(b) a weighted average test and final exam score (WTAVG) of 60 (60%) or higher where the weighted average is computed as

$$WTAVG = \frac{0.20(T1+T2+T3+FE-\min(T1,T2,T3,FE))+0.20FE}{80}$$

where T1, T2, T3 and FE are scores on Tests 1-3 and the Final Exam

NOTE: This formula has the effect of replacing the lowest test score with the final exam score if this benefits the student.

If neither of the conditions (a) and (b) above are met, the final course grade is F and the following computation of course average is irrelevant.

If either of the conditions (a) and (b) above are met, the final numerical course average (CRSAVG) is computed as

$$CRSAVG = 0.10WA + 0.10LA + 0.20(T1+T2+T3+FE - \min(T1,T2,T3,FE)) + 0.20FE$$

Again, the final exam score is substituted for the lowest test score if this benefits the student.

If either of the conditions (a) and (b) above are met, the final letter grade is determined from the course average according to a standard 10-point grading scale: 90% — A, 80% — B, 70% — C, 60% — D, below 60% — F.

Midterm Grade

On or before March 3rd, your instructor will give you a midterm grade, calculated as follows. Please note that your midterm is only an **estimate** of your grade. Your final course average could differ significantly from your midterm.

$$Midterm = (0.60T1 + 0.10LA + 0.10WA)/80*100$$

Unit Tests and Final Exam

There will be three 90-minute unit tests during the semester on the following Wednesday evenings at 5:30 PM: **February 8, March 8,** and **April 19**. The 2.5-hour Final Exam is comprehensive and is scheduled for Monday, **May 1st at 11:30 AM**. You have one week after graded tests are returned to dispute your score. After this one-week period, no grading appeals will be considered.

Students will not be permitted to use laptop computers, calculators, cellphones, or any other technology (including smart watches) on any unit test or the Final Exam. The use of a textbook and/or notes is prohibited on all MATH 1060 unit tests and the Final Exam.

An absence from a unit test or the Final Exam will result in a grade of zero. If you miss a unit test or the Final Exam due to an emergency that would qualify as an excused absence, **you must inform your instructor within 24 hours of the scheduled test or exam.** In the case of an excused absence for a unit test, the final exam score will be used in place of the missing test score.

Learning Activities

Learning Activities are determined by your individual instructor and may include in-class activities, quizzes, homework (online and traditional paper), projects, and reading quizzes.

WebAssign

Each student will work homework online through the web application WebAssign (WA). Your instructor will provide you with information about registering with WebAssign.

Students With Testing Accommodations

Students who need accommodations for testing should make an appointment to discuss their needs with the Director of Disability Services. Students should present an Academic Access Letter from Student Disability Services when they meet with instructors. Student Disability Services is located in Suite 239 Academic Success Building (656-6848; sds-l@clemson.edu). Please be aware that accommodations are **not retroactive** and new Academic Access Letters must be presented each semester. If you have a letter stating specific testing accommodations to which you are entitled, please give a copy to your instructor at least **one week prior to the test**. Your instructor will keep you informed as to how your accommodations will be handled.

Title IX

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions, and financial aid. Thus includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at http://www.clemson.edu/campus-life/campus-services/access/title-ix/. Mr. Jerry Knighton is the Clemson University Title IX Coordinator and Director of Access and Equity. 110 Holtzendorff, (864) 656-3181 (voice) or 656-0899 (TDD).

Topical Outline and Testable Skills

Students should refer to the Daily Course Calendar at the MATH 1060 course website for a listing of topics covered in Math 1060, and the days when they will be covered. Also posted is a Testable Skills document, which gives a detailed listing of the skills that students are expected to master in each unit. **Note:** *Students should expect test questions which require a synthesis of testable skills.*

Learning Outcomes

Upon completing this course, a student will be able to do the following:

1. **Limits and Continuity:** Explain the concept of a limit, apply the $\varepsilon - \delta$ definition of a limit, evaluate limits involving elementary functions, including indeterminate forms, and apply limits to determine the continuity of a function at a point.

2. **Derivative:** State and apply the limit definition of the derivative, recognize when a function is not differentiable, and use derivative theorems to calculate derivatives.

3. **Implicit Functions:** Distinguish between implicitly and explicitly defined functions and calculate derivatives for implicit functions.

4. **Derivative Applications:** Use information from derivatives to determine the behavior of a function, solve elementary optimization problems, and determine rates of change in models of physical phenomena.

5. **Antiderivatives:** Find antiderivatives, use the Substitution Method to find antiderivatives, and solve elementary initial value problems.

6. **Definite Integral:** State the definition of the definite integral as the limit of a Riemann sum and use properties of summation to evaluate certain definite integrals, including, but not limited to, definite integrals for area under a curve.

7. **Fundamental Theorem:** Evaluate definite integrals by finding antiderivatives, and demonstrate a working knowledge of the inverse relationship between differentiation and integration.

General Education Requirements

This course meets the Mathematics and Critical Thinking Competencies.

B. Mathematics - Demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods, using multiple representations where applicable.

H. Critical Thinking - Demonstrate the ability to assemble information relevant to a significant, complex issue, evaluate the quality and utility of the information, and use the outcome of the analysis to reach a logical conclusion about the issue.

Final Exam - Monday, May 1, 11:30 – 2:00

Course Coordinator

Allen Guest, O-12 Martin Hall, 656-1461, aguest@clemson.edu

Comments to: aguest@clemson.edu

Last Updated: December 14, 2016